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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,714	12/15/2005	Maw Maw Naing	NL 030712	8568

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EXAMINER	
SHAH, TANMAY K	

ART UNIT	PAPER NUMBER
2611	

NOTIFICATION DATE	DELIVERY MODE
10/01/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No.	Applicant(s)	
	10/560,714	NAING, MAW MAW	
	Examiner	Art Unit	
	TANMAY k. SHAH	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 December 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/15/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to Application No. 10/560,714 filed on 12/15/2005, claims 1 – 8 have been examined.

Specification

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

(a) TITLE OF THE INVENTION.
(b) CROSS-REFERENCE TO RELATED APPLICATIONS.
(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
(f) BACKGROUND OF THE INVENTION.
    (1) Field of the Invention.
    (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
(g) BRIEF SUMMARY OF THE INVENTION.
(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
(i) DETAILED DESCRIPTION OF THE INVENTION.
(j) CLAIM OR CLAIMS (commencing on a separate sheet).
(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 8 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In this case, processor program product for receiving radio frequency signals; it is not statutory since no requisite functionality is present to satisfy the practical application requirement. Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on a carrier signal, does not make it statutory. See Diehr, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final analysis under § 101, the claimed invention, as a whole, must be evaluated for what it is.") (quoted with approval in Abele, 684 F.2d at 907, 214 USPQ at 687). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory transitory state medium such as network link and/or network interface is not a computer component (specification, page 30, line 15-18), and it

does not become statutory by merely recording it on a Flash memory, disk drive memory, CD-ROM or other permanent storage. Protection for this type of work is provided under the copyright law.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 – 2, 5 - 8 are rejected under 35 U.S.C. 102 (b) as being anticipated by **Konishi et al (US 2001/0055956)**.

Regarding claim 1, Konishi teaches A receiver (1) for receiving radio frequency signals and comprising;

a first stage (3) for amplifying **(i.e. amplification of the digital broadcast wave RF for generating a digital broadcast wave S_{rf}, page 1, paragraph 5)** and tuning radio frequency signals and for generating intermediate frequency signals **(i.e. The mixer 3 frequency-converts the digital broadcast wave Srf for generating the intermediate frequency signal Sif. This frequency**

conversion is carried out based on a reference frequency signal SB supplied by the oscillator 4, page 1, paragraph 5);

a first gain controller (38) for controlling a gain of the first stage (3) (**i.e. RF auto gain controller, 2 of Fig. 1, RF automatic gain control signal for controlling the RF automatic gain controller, page 1, paragraph 9**);

a second stage (5) for amplifying and demodulating intermediate frequency signals (**i.e. IF Auto Gain Controller, 5 of Fig. 1, the IF automatic gain controller carries out automatic gain control and amplification of the intermediate frequency signal, page 1, paragraph 9**);

a second gain controller (54) for controlling a gain of the second stage (5) (**i.e. IF automatic gain control signal SAGI for controlling the IF automatic gain controller, page 1, paragraph 9**); which first and second gain controllers (38,54) control the gains independently from each other (**i.e. An automatic gain control signal generator SGa, SGb separately controls, based the level signal SLa, SLb, the RF automatic gain controller 2 and the IF automatic gain controller 5, abstract**).

Regarding claim 2, A receiver (1) according to claim 1, wherein both gain controllers (38,54) are adjusted at the same reference level for controlling the gains in relation to this reference level (**i.e. level detector and AGC signal generator, LD_a, SG_a, SL_a, SAG_{ia}, SAG_{ra} of Fig. 1, the AGC signal generator**

SG_a generates, based on the level signal SL_a, the IF AGC signal SAG_{ia} and the RF AGC signal SAG_{ra}).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Konishi et al (US 2001/0055956)** in further view of **Kwun (US 2003/0022642)**.

Regarding claim 3,Konishi teaches claim 2. It teaches first stage and second stage and also first IF frequency amplifier. However it does not teach second IF frequency amplifier.

Kwun teaches wherein the second stage (5) comprises a first intermediate frequency amplifier (50) **(i.e. First IF signal processor, 3 of Fig, 1, i.e. First IF signal processor 3 is configured to remove harmonic components from the first IF signal and amplify the first IF signal to a processable power level, page 2, paragraph 18)** and a second intermediate frequency amplifier (51) **(i.e. second IF signal processor, 6 of Fig. 1, the second IF signal processor 6 is configured to filter and amplify the converted second IF signal, page 2,**

paragraph 18), with the first gain controller (38) comprising a first gain detector (41) for detecting an output signal of the first intermediate frequency amplifier (50) (**i.e. AGC, 4 of Fig. 1, also Fig. 3 controlling signal, generating gain control signal and controlling AGC step S13 of Fig, 3**) and a first gain generator (40) for generating, in response to the detecting, a first gain control signal to be supplied to a control input (39) of a radio frequency amplifier (31) in the first stage (3) (**i.e. gain control signal, S9, S13 of Fig. 3, page 2, paragraph 25**).

It would have been obvious to one of the ordinary skilled in the art at the time the invention was made to combine the teachings of Konishi with Kwun. One would be motivated to combine the teachings because in doing so it will provide better gain control in receiver.

Regarding claim 4, Konishi with Kwun teaches claim 3.

Kwun Further teaches wherein the second stage (5) comprises an intermediate frequency demodulator stage (52) (**i.e. demodulator, 8 of Fig. 1**) having an input coupled to an output of the second intermediate frequency amplifier (51) (**i.e. second IF frequency processor, 6 of Fig. 1**), with the second gain controller (54) comprising a second gain detector (59) for detecting an output signal of the intermediate frequency demodulator stage (52) (**i.e. AGC controlling unit, 7 of Fig. 1**) and a second gain generator (58) for generating, in response to the detecting, a second gain control signal to be supplied to a control

input (57) of the second intermediate frequency amplifier (51) (**i.e. S13, i.e. generating gain control signal and controlling agc, page 2, paragraph 17, paragraph 21**). However Kwun does not specifically disclose that and an output coupled to an input of a video amplifier (53) for generating a video signal.

It would have been an obvious matter of design choice to one skilled in the art at the time the invention was made to construct the Gain controller using video signal. since applicant has not disclosed that this solves any stated problem or is anything more than hardware choice. A person of ordinary skill in the art would find obvious for the purpose of providing video signal for inventor's gain control system. In re Dailey and Eilers, 149 USPQ 47 (1966) see MPEP 2144.04.

Regarding claim 5, there are substantially same limitations as claim 1, thus the same rejection is applicable.

Regarding claim 6, there are substantially same limitations as claim 1, thus the same rejection is applicable.

Regarding claim 7, there are substantially same limitations as claim 1, thus the same rejection is applicable.

Regarding claim 8, there are substantially same limitations as claim 1, thus the same rejection is applicable.

Cited pertinent art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gruijters et al. (US 2006/00233288) teaches method and apparatus for coarse and fine frequency and timing synchronization.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TANMAY k. SHAH whose telephone number is (571)270-3624. The examiner can normally be reached on Mon-Thu (7:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. k. S./
Examiner, Art Unit 2611

/Kevin M. Burd/
Primary Examiner, Art Unit 2611